



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

By these means an exact matching of colors (as they appear to the color-blind eye) can be made, either between red and green, or between red or green and gray. Besides showing the presence of complete red-green blindness, it also distinguishes the "red-blind" from the "green-blind" forms of red-green blindness, in Hering's words, the "*relativ blausichtiger Rothgrünblinder*" from the "*relativ Gelbsichtiger*." It also seems capable of adaptation to other types of visual disturbance, some description of its application to which the author may publish on another occasion.

Die Untersuchung einseitiger Störungen des Farbensinnes mittels binocularer Farbengleichungen. E. HERING. Archiv für Ophthalmologie, Bd. XXXVI, (1890), H. 3, S. 1-23.

Of great interest for the theory of color vision are those cases in which color-blindness is confined to a single eye. In order, however, to yield the most exact and valuable results, the patient must not be asked to describe the colors of things seen, for this he often does inaccurately, but to match the colors seen with his color-blind eye alone with those seen at the same time with his normal eye alone. This is possible if an area of color is so presented to each eye that the one seen by the right eye is wholly invisible to the left eye, and *vice versa*, and if the two areas lie upon disparate retinal points, (e. g., on the temporal halves of the eyes), and thus escape binocular combination. Under such circumstances, very delicate comparison of colors is possible. Under the title given above, Hering describes (with one illustration) an instrument for testing such cases, and reports the result of an application of it in the case of a woman whose vision on the right side was reduced by atrophy of the optic nerve to about one-half the normal acuteness, with marked disturbance of vision for colors. The tests showed that all colors appeared more whitish or grayish to the color-blind than to the normal eye; yellow and blue did not suffer any noticeable change in their color-tone; unsaturated primary red and green (Hering's *Urroth* and *Urgrün*) appeared colorless; the intermediate colors tried, (red of spectral tone, orange, yellow-green, and unsaturated violet), lost their red or green character entirely, and appeared whitish or grayish yellow or blue; white, gray and black were for both eyes the same. The red-green vision of the patient was, therefore, nearly destroyed, the blue-yellow vision much weakened. Other tests with spectral colors gave concurrent results. Tests of the acuteness of the patient's peripheral color-vision showed the color fields reduced in size; and careful tests of the same (made later) with the color-mixer, showed that the limits of the field for the members of each color pair were the same; red and green 5°, blue and yellow 30°. Still other tests showed that colors which matched for the sound eye, also matched (*i. e.*, both suffered equal change) for the defective eye. It is hardly necessary to say that these facts speak strongly for Hering's four-color theory and against the three-color theory of Helmholtz.

Untersuchung eines Falles von halbseitiger Farbensinnsstörung am linken Auge. C. HESS. Archiv für Ophthalmologie, Bd. XXXVI, (1890), H. 3, S. 24-36.

In the case of monocular color-blindness examined by Hess, the defect was still more limited than in Hering's case, occupying, indeed, only the nasal half of one retina. The patient was a man of about thirty years and near-sighted. The sharpness of vision in the affected eye (both supplied with proper glasses) was about one-half that of the other. The colors to be matched were this time presented, one to the nasal, the other to the temporal half of the single eye. Tests with pigment colors, homogeneous spectral lights and the perimeter gave results not essentially